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The Internet - a tool for interactive learning

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Abstract

The success of the network World Wide Web is the fact that it is a huge source of information storage that can be accessed by anyone, anytime and anywhere in the world and that any administrator, with limited funds, has chance to become an information provider. The simplicity of HTML (HyperText Markup Language), used for creating interactive documents allows users (even those less experienced) to help expand the database consists of documents on the Web. Another advantage of the network is that, by its nature, it offers a way to interconnect computers that have different operating systems and also can display information created in a variety of existing media formats. Accessing the Internet, actually penetrate into a gigantic database, a network that spans the entire world, providing information and services of all kinds to all those who have a computer connected.

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Keywords: e-learning; student-professor relationship; computer mediator

1. Rationale Paper: The evolution of the internet

We live in a rapidly changing society, where digital technology is transforming every aspect of human life, while biotechnology may change very life in a single day. Modern life offers greater opportunities and options, but also greater risks and uncertainties. Contemporary space, defined as a society of generalized communication is marked by continuously enhancing the exchange of information. Dilation market information is possible due to new information technologies and communication boom which marks the end of modernism and early-postmodern era.

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The digitization of culture in society has triggered reactions at the level of the educational system, implementing new technologies becoming increasingly acute requirement in education. As a result, in recent years have intensified concerns computerization in schools and universities. UNESCO[†] has revealed explicit priority objectives of educational policy for the introduction of informatics in education to improve learning. A special reference to planning and designing programs for initial and continuous training of teachers in Eastern Europe, in the use of teaching-learning and evaluation of new technologies, was made in Moscow[‡].

History of the Internet starts in 1968 in the U.S., when from the need to save (keep) and use strategic a lot of the importance information in the event of an attack or disaster, they resorted to distributing them on multiple computers. Originally computers were interconnected university centers (UCLA and UC Santa Barbara and then Stanford University of Utah), so the late '70s there were only 10 knots. Evolving from simple mechanism for exchanging messages, the distribution of research results, programs and recent news published in each center, around 90s, the Internet was open for commercial purposes. This has led to the emergence of new services, such as for example advertising, e-commerce services, network access etc. In addition, the area has expanded and this gigantic addressing "information highway" now permeates the globe. Window to the world, open Internet, let it penetrate the souls of as many people wish to be updated with the latest information in a quick, easy and convenient.

The importance of the Internet for education and research in the U.S. led, networking of schools at all levels, regardless of their nature or profile. This led to the creation of sites with specific, dedicated to different age groups and interests.

In Romania, education is undergoing a period of great change reformist, and the Internet is a major part of these changes. The emergence and spread more significant distance education is an important part of the change taking place in education. The existence of Internet connections opens the doors of training and development in any field, for any level and any age.

E-learning, a relatively new industry in Romania and located at the beginning of exploring, learning is based on a computer and is based on distributing electronic information content (media, Internet Intranet). The advantages of e-learning consist of the user to manage their time according to their own pace and flexibility of the system, designed to encourage the creation of their own learning style. In order to be effective, these modern learning techniques must have a certain degree of interactivity and information on how to transpose multiple media (text, sound, image). Explosive growth of the Internet and Web technologies paves new information and technological challenges, and changes in human relationships.

Internet creates multiple possibilities and limitless opportunities and information, documentation, communication and entertainment to the public. WWW is the global network that democratizes the access to culture, science, education, contributing to improved quality of life.

Official WWW defined as "an initiative that allows hypermedia information retrieval from a huge area, thus giving everyone access to a large amount of information." The WWW or Web contains a large network of computers connected through the Internet, allowing the user to access a computer, the information stored in another computer (remote computer). Connecting to the Internet allows access to a computer giant spreads its branches everywhere, ensuring communication between millions of computers worldwide. Web service enables navigation information available servers. Evolution of education recorded an upward trend in the methods expository dialogue and interactive activities by resorting to increasingly multi- media, to an education teaching open distance by WEB pedagogy and structured education, disseminated everywhere and whenever signaled requirements and training needs. Multi-media education requires investment in IT infrastructure first, then literacy in computer science, followed by practical use of the computer.

At the base of design online training courses is the constructivism theory about learning who supports the possibility and the need of a systematic support for instructional and teaching. Learning in a virtual environment is based on self-directed and cooperative learning theories.

[†] International Congress "Education and Informatics" in Paris (1989),

[‡] European Seminar "European Platform for developing a mechanism for cooperation in information technologies in education"(1991)

Request revolutionizing education by introducing new technologies is growing and the supply does not yet cover the demand. Enthusiasm for e-learning registers the highs. This is explained by the advantages that online learning is flexibility in time and space. Another advantage is that it encourages us to find new ways of learning and new teaching concepts, the desire to achieve the highest possible performance.

There are, of course, limits related to this type of communication. The computer, which is a machine, does not think and feel (yet), no emotions and no sense of empathy.

In other news, virtual communication requires extra effort from the agents involved in the activity, both the student and the teacher. Students' responsibility for learning increases, they become interested in their own development. E-teacher duties are not reduced, but on the contrary increases. I.D.D. requires a certain type of interactivity with students through discussions and debates taking place in virtual seminars. Designing the online training is different than offline learning and explanations in this regard derive from the very nature of different training environments from the existence of specific variables, the variables related to teacher, student/student etc.

2. The digital curriculum

Digital Curriculum and networked applications will transform teaching and learning and assessment. The virtual classes will meet students from all continents. In a virtual school, teacher's roles expand, diversify and No way not reduced. He became an instructor in virtual seminars, specialist software and hardware, a network engineer, a moderator, a designer of educational software and software tutorials. New technology requirements are becoming larger and more numerous teachers.

Virtual Seminars assume the existence of an instructor to 15-20 students or more, depending on the concrete form of learning. Guiding students in virtual seminars is very intense. If "automate" the process more then the teacher can guide and more students. Valuation of learning businesses in a virtual field that can be used are: survey, observation activities in cyberspace, online interaction analysis, online discussion.

E-learning involves organizational changes of the educational process, methodological reconsiderations teaching-learning and evaluation, specialization of teachers. The requirements are growing more acute as the training requirements from users and the need to increase the speed of information exchange. E-teacher competences diversify, they are technical or media literacy, teaching skills, methods and skills taught educational domain.

Much of the skills are common to all teachers. Differences resulting from the specific computer-mediated communication require special conditions. Electronic learning environment requires special education forms, so ones own teaching. This type of communication requires a specialized software package for developing online training programs (program HTML)

To become an online teacher, in Germany for example, there is a series of four specialty courses after which a certificate is granted and ending an agreement that e-teacher undertakes to respect certain rules of online communication. These rules apply to desktop publishing and professional and scientific quality of documents transposed on the internet.

2.1. On-Line Design

On-line instructional design has the following components:

- Planning the course objectives and matter;
- Drafting notices indicating the work required to accomplish each stage of the course participants;
- Support implementation of online course;
- Organizing box "Help" for users;
- Specification of useful links;
- Planning of virtual seminars;
- Organizing samples (self) evaluation;

Criteria for assessing the online course to be taken into account are:

1. **Content**: Content analysis involves checking whether the proposed program corresponds in terms of reality and if they offer current and relevant information.

2. **Instructional design**: Analysis of online design requires answers to questions such course is designed so that users can learn it? Appropriate goals?

3. **Interactivity**: Analysis of this criterion involves answering questions: Are users involved in their training? What is the degree of interactivity proposed and how is it done?

4. **Ease of navigation in the program**: It is easy to view and access program access? Give short, clear explanations user program for it to be able to quickly determine the choice? There is a summary of the course and also the EXIT option? It is accompanied by the supporting elements (images, arrows) so that it does not have to read too far to guide the program?

5. **Motivational side**: This criterion involves analysis of the extent to which the program has motivational support elements of the user, such as: news, features games, quizzes, search elements and aspects, exciting stories, surprise elements.

6. **Using average**: Criterion allows answers to this questions: If the proposed program engages in the development of graphics, animations, sound effects and video? To what extent the user may have free access to them?

7. **Evaluation**: Allows questions: How is the course evaluation? There is evidence stimulating and self? There is an evaluation section, is necessary to promote the previous one to move to the next higher gear?

8. **Aesthetics program**: If the program is attractive to the eye and ear?

9. **Record performances by users**: If the program provides the learner test scores through, leading to a final score?

10. **The versatility of the program**: Is the program suitable for its intended audience? Respect it the rules of ethics and decency?

3. The models of direct and mediated interaction between teacher and student

Incidence of new technologies in education entails the development of a complex skill search, selection, structure, creation of information and self-development of certain cognitive skills (thinking structured). The new electronic learning environments convert structural model of interaction student – teacher (fig. 1) in a triangular pattern student – computer - teacher model we proposed in figure no. 2.

Analyzing this model triangular interaction mediated, computer - educated educator (created by us) can make the following observations: the interaction between teacher and student/student is done through the computer. This means that each user (so the pupil/student and teacher) have certain skills and computer operating minimal knowledge about how it can be used. In this sense, it speaks increasingly in recent years about the need for technological and informational literacy.

Common repertoire involves, in addition to accessibility and common codes and compatibility among computers. Educational messages are transmitted indirectly between the two agents, unlike traditional teaching-learning situations (face-to -face). Disturbances messages that appear in the regular class learning are minimized in the virtual environment. Distortion may appear otherwise, such as those relating to the operation of the computer, the transmission of information, the blackouts, the performance of your computer speed and storage etc. Everything is done by the computer, even the assessment. Feed-back is fast and efficient. There is an external reverse connection (E.R.C.) between student and teacher by electronic media and one between user and computer (through assessment tests that he resolves electronic and are corrected by computer) and an internal reverse connection (I.R.C.) at the individual level. External reverse connection, following the speed with which it is performed and that it is the product of an assessment relieve stress has profound implications for motivational and self-developing capabilities of the user.

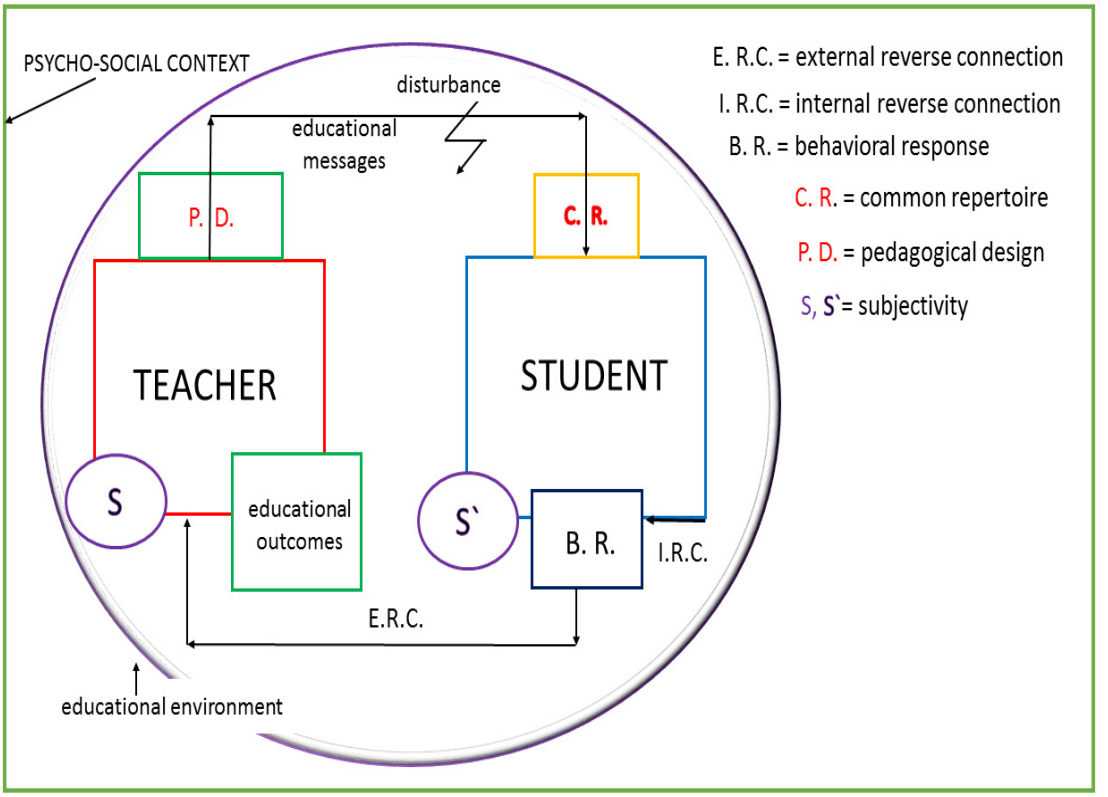

Fig. 1. Structural model of direct interaction between the student and the teacher[§].

In the e-learning, education has more autonomy and can work at your own pace, choosing and centers of interest, having intrinsic motivation, distributing and one priorities and tasks, learning to effectively organizes time. He becomes responsible for its own evaluation, is actively involved in this process, elements of negotiation, advice and consensus between the educator and educated gaining importance. Evaluation of e-learning system is less stressful because it takes facets forming, and when it is decided by consensus is achieved. The initiative for assessment comes from the student, increasing involvement and awareness efforts. Interactivity is provided by the tasks given, the references being present, and supports multi-media (text, sound, images, animations, videos).

Computer professionals have tried to reduce the drawbacks of learning in a virtual environment directly related to lack of interpersonal contact, creating a friendly interface and encouraging user interactivity. The interaction between the facilitator and participants can be synchronous - Chat - or asynchronous - Conferences. The facilitator can give online consultations using Live Chat.

[§] Oprea C.L., 2009, *Strategii didactice interactive*, Ed. Didactică şi Pedagogică, Bucureşti, p. 184;

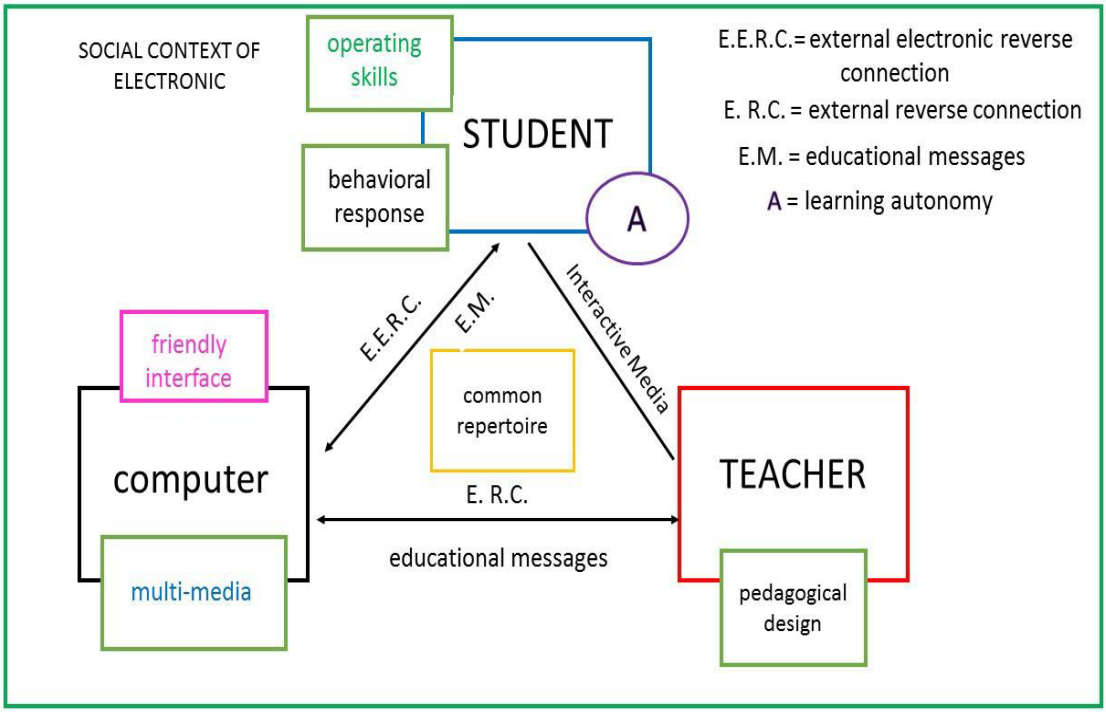

Fig. 2. The triangle of mediated interaction: computer - student - teacher [**]

The computer may equally to instruct, assist in solving tasks and entertain. Educational environment specific learning situations face-to-face is replaced with virtual learning environment. Teacher education courses receive in your environment (home), in which it organizes leisure.

Learning with the Internet is considered as an attractive educational alternative that reduces restrictions order temporal, social, spatial or otherwise.

4. The advantages of e-learning

Advantages notified from our experience of this type of learning are as follows:

- accessibility, flexibility and comfort, so that the user can decide himself for the moment and the time involved in the training activities;
- working space is intimate and requires no formality;
- teacher interaction is non-binding and free;
- user can learn at his own way, controlling the rapid progress, with a rapid and continuous feedback;
- time costs low: access to information is unlimited and can be done quickly, at any time and from any location;
- unnecessary travel expenses and no any current professional business interruption;
- low cost distribution and transport of materials for preparation;
- if the traditional schools are organized by age groups, the online programme is organized by subjects, in a virtual classroom can be reunited subjects of all ages, with different backgrounds, neglecting the boundaries of space;

[**] Oprea C.L., 2009, *Strategii didactice interactive*, Ed. Didactică și Pedagogică, București, p. 185;

- the specific of learning in a virtual environment is the focus on the user;
- original course user friendliness update with changes in the field concerned. The course can be quickly redesigned and the current users become aware of the new changes;

5. The disadvantages of e-learning

Discussing the issue *disadvantages* created online training with the students, we note the following questions:

- Can the computer replace human contact?
- Worth the investments in IT infrastructure?
- Has this type of learning the effect that you become more comfortable?
- Leads the Internet to the death of books?

The *limits* of online learning might be given that:

- preparing an online course is more expensive than a traditional (but costs are then amortized quickly). Training based on the Internet requires also time and money for implementation, technology development and training of specialists in the field;
- related to technological, lack of technological resources and the performance of optimal connection to the network, the low performance in the sound and video and even some extensive graphics. It takes time to load, waiting eagerly and stress can create user. Problems of this type occur when the current is very busy network or user has a less powerful computer;
- problems arise from lack of human contact face-to-face socialization essential to the individual;
- not any course, in any field, can be delivered via computer. Some areas/courses calls for a deeper human involvement and personal goals to achieve an emotional times to stimulate teamwork;
- opinion of specialists, training that is based on Internet use is not static.

6. Conclusion

However WWW (World Wide Web) is a network that opens wide opportunities for training in any field and for anyone who has an Internet connection. This modern world of information dissemination provides connections between virtual communities that ignore the boundaries of the world.

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